

Remarks

Since the amendments (to add the subject matter of claim 5 to claim 1), in the last response were made on the basis of the offer of allowable subject matter, which offer has now been clarified and withdrawn, these amendments are also withdrawn as a consequence. Thus claim 1 returns to its scope before these amendments, subject to clarifying amendments, which will be discussed after the issue of non-obviousness. Claim 22 obviously should logically fall in the place of cancelled claim 5.

In response to the rejection for obviousness over Taghadoss in view of Boer, the following comments are made.

Claim 1 is distinguished by the claim feature of "using the predetermined multiplex layer protocol to deduce and model higher layers of functions off the given subnetwork, for the given traffic services, based on the off-network pointer" The Examiner now argues that "Boer discloses that the pointer is first generated in one layer and functionality at other layers being generated in response thereto."

But even if true, this is not the same as what is claimed, and the differences are important. Boer only shows (col 5) selecting and setting up a link between a source and a destination by defining potential access points (as abstractions of elements at a lower network layer) on the basis of the amount of available capacity, identifying possible paths (links) between a source network and a destination network, selecting a preferred one of the paths, and repeating for a smaller sub network containing the destination, until the path reaches the destination.

This is only concerned with determining which sublinks, of a mesh of such sub links, to use for the communication. This is confirmed by the statement that "The

repeated partitioning provides a substantially recursive procedure which expediently provides for a simplified determination of sublinks.” (lines 50-53 of col 2).

Hence there is no disclosure of the claim feature of deducing and modelling “higher layers of functions off the given subnetwork, for the given traffic services”.

Nor is there any suggestion of doing so “based on the off network pointer”.

The closest Boer seems to come is disclosure of access points at which properties of the network are grouped, in that network elements and their properties are represented in a functionally combined way at a higher abstraction level (lines 42-45 of col 2). But the claim does not try to encompass merely representing the functions which are simply stored and retrieved in Boer, instead the claim goes further and is explicitly limited to deducing and modelling higher layers of functions, based on the pointer. To “deduce” something cannot reasonably be interpreted as merely retrieving it. It must mean generating more information from the information given. In Boer there is no need to deduce higher layer functions, as Boer is only concerned with selecting sublinks. So there is no suggestion in Boer providing any incentive for a skilled person to alter Boer to reach the present invention.

The Examiner also tries to argue that “Taghadoss disclosed using the predetermined multiplex layer protocol to deduce and model higher layers of functions off the given subnetwork, for the given traffic services based on lower level network elements.” Even if this is true, it is not what is claimed, and again the differences are important. The claim is properly limited to the deducing and modelling of the higher layers of functions off the given sub network being “based on the off network pointer”. There is no suggestion in Taghadoss of this off network pointer, nor of deducing higher layers from it, as the Examiner appears to acknowledge.

So, as explained above, there is no disclosure in Boer of deducing higher layers of functions. As explained above, there is no disclosure in Taghadoss of deducing such higher layers from the off network pointer. Hence there is no suggestion in either document of the claim feature of deducing higher layers from the off network pointer. Hence even if the documents are combined, there is no suggestion of this claim feature. For this reason alone, the claim would not have been obvious over the cited references, taken alone or in combination.

This distinctive feature is significant because it helps enable the model of a given subnetwork to model features such as trails or traffic services over trails to other subnetworks, without the additional complexity of needing access to the internal details of the other subnetworks, which may be owned by other parties, or use incompatible management systems for example.

It is not permissible to dissect the claim word by word and argue that Boer shows an off network pointer and Taghadoss shows deducing, and thus the claim feature of deducing from the off network pointer is shown by the two references. Otherwise a dictionary could be used to invalidate any claim.

There are other arguments which confirm the non obviousness, such as the access points of Boer not being the same as the off network pointer as has been argued previously. Furthermore, since Boer is concerned with routing, and Taghadoss is concerned with identifying the current state of logical and physical entities, there is no reason or incentive for a skilled person to combine these two documents, nor any reason to select particular features from them to combine.

The other claims are dependent or have corresponding distinctive features and so are allowable for the same reasons.

These amendments and arguments do not raise any new issues, since apart from clarifying amendments, the claims are the same as they were in the

response of December 2005. The Examiner has not yet addressed the arguments set out above explaining how these claims are distinguished over the prior art.

Regarding the section 112 rejections, the references to a number of layers in claims 1 and 11 have been amended to refer to a defining a number of layers of multiplexing. A skilled person would have no difficulty understanding this.

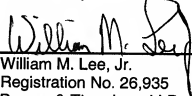
The claim term "determining those ports that represent valid termination points for trails, links and link connections in the subnetworks, whereby to generate trails interconnecting said connection termination points in different subnetworks" has been moved back to its original position in new claim 22 (which logically would be in the place of claim 5), and clarified to set out the generating of trails as an explicit step. A skilled person would have no difficulty interpreting this feature, and envisaging various ways of implementing it. Thus it is not appropriate to limit the claim to any one way of determining which ports represent valid termination points, and leave other ways unprotected.

Regarding the rejection of claim 13 under section 101, this claim has been amended as suggested by the Examiner.

All the points raised have been dealt with, all the claims are submitted to be allowable and reconsideration is requested.

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Respectfully submitted,



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